CLAIMS

1. A process for coating the rolls (1A, 1B) of a twin-roll continuous casting machine (1) including the application of at least one release product to said rolls, said release product containing a release agent and a carrier fluid, characterised in that it includes an adjustment of the composition of said release product while it is applied to said rolls.

2. A coating process according to claim 1, characterised in that said adjustment of the composition comprises an adjustment of the proportion of release agent contained in the release product.

3. A coating process according to claim 1 or 2, characterised in that it additionally comprises an adjustment of the release product flow.

4. A coating process according to any one of the claims 1 to 3, characterised in that the release product is a suspension, a solution or a mixture thereof.

5. A coating process according to any one of the claims 1 to 4, characterised in that the release agent includes graphite.

6. A coating process according to any one of the claims 1 to 5, characterised in that the carrier fluid includes water.

7. A coating process according to any one of the claims 1 to 6, characterised in that said adjustment of the composition comprises a dilution of a concentrate of release agent in said carrier fluid.

8. A coating process according to claim 7, characterised in that said concentrate is a mother

suspension, a concentrated solution or a mixture thereof.

9. A coating process according to claim 7 or 8, characterised in that said concentrate is selected from among concentrated suspensions of graphite, boron nitride, colloidal silica, magnesia, organic products or a mixture thereof.

10. A coating process according to claim 7 or 8, characterised in that said concentrate is a graphite gel containing between 20 and 30% by weight of graphite.

11. A coating process according to any one of the claims 1 to 10, characterised in that said adjustment of the composition is carried out retroactively as a function of measurements carried out on said casting machine.

12. A coating process according to claim 11, characterised in that it includes a regulation loop.

13. A coating process according to claim 11 or 12, characterised in that said measurements include measurements selected from among optical, laser, infrared, vibration, or mechanical tension measurements.

14. A coating process according to any one of the claims 1 to 13, characterised in that said adjustment of the composition is carried out in an automated way.

15. A process for twin-roll continuous casting of metal strips including a coating process according to any one of the claims 1 to 14.

16. A continuous casting process according to claim 15, characterised in that said metal strips are made of aluminium, aluminium alloy, copper or copper alloy.

17. A device for coating rolls (1A, 1B) of a twin-roll continuous casting machine (1) including coating means (5, 51, 52, 6, 61, 62, 7, 8, 20, 21) for applying at least one release product (24) to said rolls, characterised in that it includes means (30 to 41) for adjusting the composition of said release product while it is applied to said rolls.

18. A coating device according to claim 17, characterised in that said means for adjusting the composition include a mixer (40), a release agent feed (41), a means (32) of regulating the release agent feed and a carrier fluid feed (30).

19. A coating device according to claim 18, characterised in that the regulation means (32) includes a measuring pump.

20. A coating device according to claim 18 or 19, characterised in that the release agent feed (41) includes a tank (34) fit to contain a release agent concentrate (35).

21. A coating device according to any one of the claims 17 to 20, characterised in that it includes means (38, 39) for homogenising the release product.

22. A coating device according to any one of the claims 17 to 21, characterised in that the coating means include means (20) for controlling the flow of the spray means (5, 51, 52).

23. A coating device according to any one of the claims 17 to 22, characterised in that said coating means include a spray means (5) for each roll (1A, 1B) and means (80 to 84) for displacing said spray means (5) along each roll.

24. A coating device according to any one of the claims 17 to 22, characterised in that said coating

means include at least two spray means (51, 52) for each roll (1A, 1B), said spray means forming an integral unit, and means (80 to 84) for displacing each said unit along each roll.

25. A device according to claim 24, characterised in that the spray means of each said unit are superposed.

26. A device according to any one of the claims 23 to 25, characterised in that said displacement means (80 to 84) make it possible to displace said spray means in a to-and-fro motion along an axis parallel to the axis (A, B) of the rolls.

27. A coating device according to any one of the claims 17 to 22, characterised in that said coating means include at least two spray means (5) for each roll and in that said spray means are placed on a line approximately parallel to the axis (A, B) of each said roll (1A, 1B).

28. A coating device according to any one of the claims 17 to 27, characterised in that it comprises means for making at least one of the spray means oscillate relative to a specific axis.

29. A coating device according to any one of the claims 17 to 28, characterised in that the spray means (5, 51, 52) are selected from the group including nozzles and guns.

30. A coating device according to any one of the claims 17 to 29, characterised in that it includes means for controlling retroactively said adjustment of the composition as a function of measurements carried out on said casting machine.

31. A coating device according to any one of the claims 17 to 30, characterised in that it includes

means for controlling in an automated way said adjustment of the composition.

32. A coating device according to any one of the claims 17 to 31, characterised in that said means (30 to 41) for adjusting the composition of the release product may form an adjustment device (42), which is distinct, detachable and/or able to be dismantled.

33. A machine for twin-roll continuous casting of metal strips equipped with a coating device according to any one of the claims 17 to 32.

34. A machine according to claim 33, characterised in that it includes at least one sensor for determining the quantity of release agent present on the surface (10) of the rolls which produces a signal able to be used retroactively for adjusting the composition of the release product.

35. A machine according to claim 34, characterised in that said sensor is selected from among optical sensors, laser systems, cameras, infrared sensors, vibration sensors and mechanical tension sensors.

36. A process for regulating a machine (1) for twin-roll continuous casting of metal strips including the application of at least one release product on said rolls, said release product containing a release agent and a carrier fluid, characterised in that it includes an adjustment of the composition of said release product while it is applied to said rolls.

37. A regulation process according to claim 36, characterised in that said adjustment is carried out as a function of the operating conditions of said machine (1).

38. A regulation process according to claim 36 or 37, characterised in that said adjustment of the

composition is carried out retroactively as a function of measurements carried out on said casting machine.

39. A regulation process according to claim 38, characterised in that it includes a regulation loop.

40. A regulation process according to claim 38 or 39, characterised in that said measurements include measurements selected from among optical, laser, infrared, vibration, or mechanical tension measurements.

41. A regulation process according to any one of the claims 36 to 40, characterised in that said adjustment of the composition is carried out in an automated way.